

Title (en)

INTEGRATED DEVICE COMPRISING HIGH DENSITY INTERCONNECTS AND REDISTRIBUTION LAYERS

Title (de)

INTEGRIERTE VORRICHTUNG MIT HOCHDICHTEN VERBINDUNGEN UND UMVERTEILUNGSSCHICHTEN

Title (fr)

DISPOSITIF INTÉGRÉ COMPRENANT DES ÉLÉMENTS D'INTERCONNEXION À HAUTE DENSITÉ ET DES COUCHES DE REDISTRIBUTION

Publication

**EP 3114707 A1 20170111 (EN)**

Application

**EP 15710373 A 20150304**

Priority

- US 201414196817 A 20140304
- US 2015018784 W 20150304

Abstract (en)

[origin: US2015255416A1] Some novel features pertain to an integrated device (e.g., integrated package) that includes a base portion for the integrated device, a first die coupled to a first surface of the base portion, and an underfill between the first die and the base portion. The base portion includes a dielectric layer, and a set of redistribution metal layers. In some implementations, the integrated device further includes an encapsulation material that encapsulates the first die. In some implementations, the integrated device further includes a second die coupled to the first surface of the base portion. In some implementations, the integrated device further includes a set of interconnects on the base portion, the set of interconnects electrically coupling the first die and the second die. In some implementations, the first die includes a first set of interconnect pillars and the second die includes a second set of interconnect pillars.

IPC 8 full level

**H01L 23/538** (2006.01); **H01L 21/56** (2006.01)

CPC (source: CN EP US)

**H01L 23/3107** (2013.01 - CN US); **H01L 23/3157** (2013.01 - CN US); **H01L 23/5389** (2013.01 - CN EP US); **H01L 24/19** (2013.01 - CN EP US); **H01L 24/24** (2013.01 - CN EP US); **H01L 24/25** (2013.01 - CN US); **H01L 24/82** (2013.01 - CN EP US); **H01L 24/96** (2013.01 - CN EP US); **H01L 21/568** (2013.01 - CN EP US); **H01L 2224/0401** (2013.01 - CN EP US); **H01L 2224/04105** (2013.01 - CN EP US); **H01L 2224/05572** (2013.01 - CN EP US); **H01L 2224/12105** (2013.01 - CN EP US); **H01L 2224/131** (2013.01 - CN EP US); **H01L 2224/24137** (2013.01 - CN EP US); **H01L 2924/014** (2013.01 - CN); **H01L 2924/14335** (2013.01 - CN EP US); **H01L 2924/1434** (2013.01 - CN EP US); **H01L 2924/1815** (2013.01 - CN US)

Citation (search report)

See references of WO 2015134638A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 2015255416 A1 20150910**; **US 9230936 B2 20160105**; CN 106068558 A 20161102; EP 3114707 A1 20170111; JP 2017507495 A 20170316; WO 2015134638 A1 20150911

DOCDB simple family (application)

**US 201414196817 A 20140304**; CN 201580011603 A 20150304; EP 15710373 A 20150304; JP 2016555342 A 20150304; US 2015018784 W 20150304